

New  
Specification



**ADVANCED**  
**General Certificate of Education**  
**2018**

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**Economics**  
Assessment Unit A2 1  
*assessing*  
Business Economics  
**[AEC11]**  
**TUESDAY 5 JUNE, AFTERNOON**

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**MARK  
SCHEME**

## General Marking Instructions

This mark scheme is intended to ensure that the A2 examinations are marked consistently and fairly. The mark scheme provides examiners with an indication of the nature and range of candidate responses likely to be worthy of credit. It also sets out the criteria which they should apply in allocating marks to candidates' responses. The mark schemes should be read in conjunction with these general marking instructions which apply to all papers.

### Quality of candidates' responses

In marking the examination paper, examiners will be looking for a quality of response reflecting the level of maturity which may reasonably be expected of 18-year-olds, which is the age at which the majority of candidates sit their A2 examinations.

### Flexibility in marking

The mark scheme is not intended to be totally prescriptive. For many questions, there may be a number of equally legitimate responses and different methods by which the candidates may achieve good marks. No mark scheme can cover all the answers which candidates may produce. In the event of unanticipated answers, examiners are expected to use their professional judgement to assess the validity of answers. If an answer is particularly problematic, then examiners should seek the guidance of the Supervising Examiner for the paper concerned.

### Positive marking

Examiners are encouraged to be positive in their marking, giving appropriate credit for valid responses rather than penalising candidates for errors or omissions. Examiners should make use of the whole of the available mark range for any particular question and be prepared to award full marks for a response which is as good as might reasonably be expected for 18-year-old candidates. Conversely, marks should only be awarded for valid responses and not given for an attempt which is completely incorrect and inappropriate.

### Types of mark schemes

Mark schemes for questions which require candidates to respond in extended written form are marked on the basis of levels of response which take account of the quality of written communication. These questions are indicated on the cover of the examination paper. Other questions which require only short answers are marked on a point for point basis with marks awarded for each valid piece of information provided. Some material may be included in the mark scheme for the benefit of teachers and pupils preparing for future examinations. Candidates are not expected to have provided this information. Such material is printed in the mark scheme in italics.

### Levels of response

Questions requiring candidates to respond in extended writing are marked in terms of levels of response. In deciding which level of response to award, examiners should look for the "best fit" bearing in mind that weakness in one area may be compensated for by strength in another. In deciding which mark within a particular level to award to any response, examiners are expected to use their professional judgement. The following guidance is provided to assist examiners.

**Threshold performance:** Response which just merits inclusion in the level and should be awarded a mark at or near the bottom of the range.

**Intermediate performance:** Response which clearly merits inclusion in the level and should be awarded a mark at or near the middle of the range.

**High performance:** Response which fully satisfies the level description and should be awarded a mark at or near the top of the range.

**Marking calculations**

In marking answers involving calculations, examiners should apply the “own figure rule” so that candidates are not penalised more than once for a computational error.

**Quality of written communication**

Quality of written communication is taken into account in assessing candidates’ responses to all questions that require them to respond in extended written form. These questions are marked on the basis of levels of response. The description for each level of response includes reference to the quality of written communication. Where the quality of candidates’ economics is not matched by the quality of written communication, marks awarded will not exceed the maximum for Level 2 in questions which have three levels of response or the maximum for Level 3 in those which have four levels of response.

For conciseness, quality of written communication is distinguished within levels of response as follows:

Level 1: Quality of written communication is limited.

Level 2: Quality of written communication is satisfactory.

Level 3: Quality of written communication is of a high standard.

Level 4: Quality of written communication is excellent.

In interpreting these level descriptions, examiners should refer to the more detailed guidance provided below:

**Level 1 (Limited):** The candidate makes only a limited attempt to select and use an appropriate form and style of writing. The organisation of material may lack clarity and coherence. There is little use of specialist vocabulary. Presentation, spelling, punctuation and grammar may be such that intended meaning is not clear.

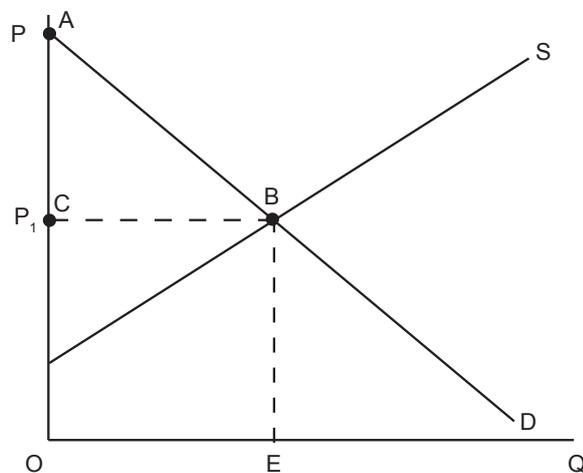
**Level 2 (Satisfactory):** The candidate makes a reasonable attempt to select and use an appropriate form and style of writing, supported with appropriate use of diagrams as required. Relevant material is organised with some clarity and coherence. There is some use of appropriate specialist vocabulary. Presentation, spelling, punctuation and grammar are sufficiently competent to make meaning evident.

**Level 3 (High Standard):** The candidate successfully selects and uses an appropriate form and style of writing, supported with the effective use of diagrams where appropriate. Relevant material is organised with a high degree of clarity and coherence. There is widespread use of appropriate specialist vocabulary. Presentation, spelling, punctuation and grammar are of a sufficiently high standard to make meaning clear.

**Level 4 (Excellent):** The candidate successfully selects and uses the most appropriate form and style of writing, supported with precise and accurate use of diagrams where appropriate. Relevant material is extremely well organised with the highest degree of clarity and coherence. There is extensive and accurate use of appropriate specialist vocabulary. Presentation, spelling, punctuation and grammar are of the highest standard and ensure that meaning is absolutely clear.

## Section A

- |   |  | AVAILABLE MARKS |
|---|--|-----------------|
| 1 | (a) [3] for calculation of total revenue equal to £3,200,000<br>The profit maximising point occurs where $MC = MR$ hence the firm will produce 400,000 units and charge a price of £8 ( $400,000 \times £8$ )<br>Up to [2] for correct methodology but error in calculation  | [3]             |
|   | (b) [3] for calculation of increase in total revenue equal to £400,000<br>(£3,600,000 – £3,200,000)<br>The revenue maximising point occurs at the point where $MR = 0$ hence the firm will produce 600,000 units and charge a price of £6<br>Up to [2] for correct methodology but error in calculation  | [3]             |
| 2 | (a) [3] for calculation of average total cost equal to £550<br>(£90,000 + £75,000 ( $300 \times £250$ ) = £165,000/300 or £90,000/300 + £250<br>Up to [2] for correct methodology but error in calculation   | [3]             |
|   | (b) [2] for calculation of selling price equal to £715 ( $£550 \times 1.3$ )<br>[1] for correct methodology but error in calculation   | [2]             |
| 3 | The private sector refers to organisations that are privately owned and are not part of government. This includes companies such as Tesco and Apple.<br>The public sector refers to organisations that are owned and operated by the government. This includes organisations such as the NHS and the civil service.<br>[2] for explanation of difference between private and public sector<br>[1] for use of appropriate examples in each case | [3]             |
| 4 | Perfect price discrimination occurs whenever a firm charges each consumer the maximum price he or she is willing to pay for each item. If Shagpile Mats sold their mats at the market equilibrium their total revenue would be represented by the area OCBE. Switching to perfect price discrimination would increase total revenue to area OABE.<br>Hence total revenue is increased by area ABC.   | 6               |
|   |  | 5               |
|   |  | 3               |



**Issues and areas for analysis include:**

- Explanation of price discrimination
- Discussion of conditions necessary for price discrimination
- Discussion of how total revenue is calculated
- Appropriate diagrams showing change in total revenue
- Appropriate examples

**Level 1 ([1]–[2])**

A basic response provides an answer that demonstrates:

- Basic knowledge and understanding of relevant terminology, concepts, principles and models.
- Basic application of relevant economic principles, terminology, concepts and models to the context of the question; limited use of relevant data, and diagrams where relevant, to address the issues in the question.
- Basic analysis; may lack focus.
- A low quality of written communication.

**Level 2 ([3]–[4])**

A good response provides an answer that demonstrates:

- Good knowledge and understanding of relevant terminology, concepts, principles and models.
- Good application of relevant economic principles, terminology, concepts and models to the context of the question; where relevant, data and diagrams are used reasonably to address the issues in the question.
- Good analysis in relation to the impact on economic agents; analysis may not be developed fully or may have some inaccuracy at times.
- A good quality of written communication.

**Level 3 ([5]–[6])**

An excellent response provides an answer that demonstrates:

- Excellent accurate knowledge and understanding of relevant terminology, concepts, principles and models.
- Excellent application of relevant economic principles, terminology, concepts and models to the context of the question; where relevant, data and diagrams are used effectively to address the issues in the question.
- Well focused, relevant analysis used accurately and appropriately in relation to the impact on economic agents.
- An excellent quality of written communication. [6]

**Section A**AVAILABLE  
MARKS

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## Section B

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MARKS

- 5 (a) UK has the lowest mobile phone charges of the 6 countries shown. At £35 the average cost of a mobile contract is approx. 45% cheaper than the most expensive country, the USA, and almost 25% cheaper than the next cheapest, France.  
[2] for comparison in absolute terms  
[2] for appropriate manipulation of data [4]
- (b) Market share is defined as the proportion of total sales in a market that is accounted for by a particular brand, product or company. It is normally calculated by taking a company's sales revenue and dividing it by the total value of sales in that particular market. This is the figure shown in column 2 of the table. Alternatively it can be calculated by taking the total number of subscribers a company has and dividing it by the total number of subscriptions in that market.

While these estimates of market share are very useful, they are not without their problems. For example:

- The figure calculated will vary according to whether it is based on the value of sales or the number of subscribers. To illustrate this, consider the market share for O2. When calculated on the basis of revenue their market share is 21%. However when calculated by the number of subscribers their market share increases to 29%. This would suggest that O2 earn less revenue from each customer than a company such as EE
- You also need to consider whether the market you are measuring is the local market, the regional market or the national market. For example, while EE has a UK national market share of approximately 33%, its market share may be significantly larger in some smaller geographical areas
- The market needs to be clearly defined in terms of the good or service. In the mobile phone industry the market share figure will obviously differ if you include not only monthly contracts but also pay as you go subscriptions
- Collecting accurate data may be difficult as the market is so large and complex and people are changing contracts all the time

**Areas for analysis and discussion include:**

- Definition of market share
- Explanation of how market share and market concentration are measured
- Numerical example
- Reference to differences in figures based on value and volume
- Reference to difficulties in measuring market share, e.g. setting geographical boundaries or setting product boundaries
- Reference to alternative concentration ratios – employment, etc.
- Appropriate examples

**Level 1 ([1]–[3])**

A basic response provides an answer that demonstrates:

- Basic knowledge and understanding of relevant terminology, concepts, principles and models.

- Basic application of relevant economic principles, terminology, concepts and models to the context of the question; limited use of relevant data, and diagrams where relevant, to address the issues in the question.
- Basic analysis; may lack focus.
- A low quality of written communication.

### Level 2 ([4]–[6])

A good response provides an answer that demonstrates:

- Good knowledge and understanding of relevant terminology, concepts, principles and models.
- Good application of relevant economic principles, terminology, concepts and models to the context of the question; where relevant, data and diagrams are used reasonably to address the issues in the question.
- Good analysis in relation to the impact on economic agents; analysis may not be developed fully or may have some inaccuracy at times.
- A good quality of written communication.

### Level 3 ([7]–[9])

An excellent response provides an answer that demonstrates:

- Excellent accurate knowledge and understanding of relevant terminology, concepts, principles and models.
- Excellent application of relevant economic principles, terminology, concepts and models to the context of the question; where relevant, data and diagrams are used effectively to address the issues in the question.
- Excellent, relevant analysis used accurately and appropriately in relation to the impact on economic agents.
- An excellent quality of written communication. [9]

- (c) A natural oligopoly occurs whenever maximum efficiency is achieved through a small number of suppliers rather than through a large number of competing suppliers.

A natural oligopoly generally occurs in industries where the fixed costs of production are so high that it is not profitable for more than a few firms to enter and compete.

In the UK mobile phone industry there is a “natural” reason for the market being oligopolistic, namely that the Minimum Efficient Scale (MES) occurs at such a large proportion of total output that only a small number of firms could produce at the point where AC is minimised. Source 2 suggests that the huge fixed costs associated with the development of a network capable of delivering 4G services to the whole of the UK means that the industry can only accommodate two or three big players. However, the EU competition authorities feel that the industry is large enough for 4 large firms to survive and that maximum efficiency is more likely to occur with 4 large firms rather than just 3.

#### Areas for analysis and discussion include:

- Definition of natural oligopoly
- Discussion of economies of scale
- Discussion of fixed costs associated with building and maintaining a 4G network
- Discussion of MES

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MARKS

- Definition of oligopoly
- Features of oligopolistic markets – interdependence, non-price competition, barriers to entry, etc.
- Relevant examples
- Relevant diagrams

### Level 1 ([1]–[4])

A basic response provides an answer that demonstrates:

- Basic knowledge and understanding of relevant terminology, concepts, principles and models.
- Basic application of relevant economic principles, terminology, concepts and models to the context of the question.
- Some limited use of data, and diagrams where relevant, in relation to the context of the question.
- Basic analysis; analysis may lack focus.
- Judgement(s) unsupported.
- A low quality of written communication.

### Level 2 ([5]–[8])

A good response provides an answer that demonstrates:

- Good knowledge and understanding of relevant terminology, concepts, principles and models.
- Good application of relevant economic principles, terminology, concepts and models to the context of the question; where relevant, some reasonable use of data and diagrams in relation to the context of the question.
- Good analysis in relation to the impact on economic agents; analysis may not be developed fully or may have inaccuracies at times.
- Reasonable judgement(s) building on analysis.
- A good quality of written communication.

### Level 3 ([9]–[12])

An excellent response provides an answer that demonstrates:

- Excellent accurate knowledge and understanding of relevant terminology, concepts, principles and models.
- Excellent application of relevant economic principles, terminology, concepts and models to the context of the question; where relevant, data and diagrams are used effectively to address the issues in the question.
- Well focused, relevant analysis used accurately and appropriately in relation to the impact on economic agents.
- Informed judgements that directly address the issues in the question and reach clear conclusions built on analysis.
- An excellent quality of written communication. [12]

- (d) Competition authorities have a wide range of tools at their disposal when intervening in a market to improve the outcomes for consumers. These methods include: regulations, price controls, the use of windfall taxes, subsidising competitors, removing barriers to entry, nationalising the industry and breaking up the large firms into smaller separate companies.

Clearly each of these policies has their advantages and disadvantages.

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MARKS

**Areas for analysis and discussion include:**

- Discussion of what constitutes a market working well for consumers
  - price
  - quality of coverage
  - customer service
  - nature of contract, including ease of switching
- The efficiency of government regulation
- The difficulty in setting an appropriate price (RPI – X formula)
- Discussion of regulatory capture
- Evaluation based on contestable markets
- The opportunity cost of using subsidies
- Welfare implications of taxation and other forms of intervention
- Reference to UK and EU competition policy
- Administration costs of any intervention
- Potential for legal challenges
- Appropriate examples
- Appropriate diagrams

**\*The range of possible points illustrated here is much more extensive than would be required in an excellent response.**

**Level 1 ([1]–[5])**

A basic response provides an answer that demonstrates:

- Basic knowledge and understanding of relevant terminology, concepts, principles and models.
- Basic application of relevant economic principles, terminology, concepts and models to the context of the question.
- Some limited use of data, and diagrams where relevant, in relation to the context of the question.
- Basic analysis; analysis may lack focus.
- Judgement(s) unsupported.
- A low quality of written communication.

**Level 2 ([6]–[10])**

A good response provides an answer that demonstrates:

- Good knowledge and understanding of relevant terminology, concepts, principles and models.
- Good application of relevant economic principles, terminology, concepts and models to the context of the question; where relevant, some reasonable use of data and diagrams in relation to the context of the question.
- Good analysis in relation to the impact on economic agents; analysis may not be developed fully or may have inaccuracies at times.
- Reasonable judgement(s) building on analysis.
- A good quality of written communication.

**Level 3 ([11]–[15])**

An excellent response provides an answer that demonstrates:

- Excellent accurate knowledge and understanding of relevant terminology, concepts, principles and models.
- Excellent application of relevant economic principles, terminology, concepts and models to the context of the question; where relevant, data and diagrams are used effectively to address the issues in the question.

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- Well focused, relevant analysis used accurately and appropriately in relation to the impact on economic agents.
- Informed judgements that directly address the issues in the question and reach clear conclusions built on analysis.
- An excellent quality of written communication.

[15]

**Section B****AVAILABLE  
MARKS**

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**40**

## Section C

AVAILABLE  
MARKS

- 6 Like all economic models the model of contestable markets requires the existence of a number of highly abstract and unrealistic assumptions.

Clearly these assumptions, particularly the assumption of perfect knowledge and no sunk costs, are unlikely to be replicated in reality. Indeed Baumol himself stated “perfectly contestable markets do not populate the world of reality any more than perfectly competitive markets do”.

As a result some have argued that the model is of little benefit to modern economists, businesses or regulators.

These economists argue that the other models in the traditional theory of the firm are more realistic and therefore they are of greater use in predicting the behaviour of modern firms. They point particularly to modern theories of oligopoly which take account of the potential for collusive behaviour as models of best practice.

Critics of the contestable markets model also argue that the rationale it provides for deregulation is fundamentally flawed and point particularly to the US airline industry as an example of the consolidation and inefficiency that can occur when markets are deregulated in the mistaken belief that contestability will lead to efficient outcomes.

However, other economists argue that the theory of contestable markets provides a useful framework for analysing the behaviour of firms in the real world since it does not require specific assumptions with regard to product homogeneity or the number of firms in the industry as is the case in the traditional theories of the firm. They argue that globalisation, the deregulation of markets and the pace of technological change have combined to make markets more contestable. They point to the successful deregulation of telecommunication and energy markets as clear evidence that greater contestability brings benefits to consumers. Indeed it is also clear from recent decisions by the Competition and Markets Authority that the theory of contestable markets continues to play a significant role in their decision making.

**Areas for analysis and discussion include:**

- Discussion of assumptions of the models of perfect competition and contestable markets
- Discussion of unrealistic assumptions of both models
- Discussion of recent developments in the theory of the firm and particularly in the model of oligopoly
- Discussion of the uncompetitive behaviour of markets believed to be contestable – airlines
- Discussion of unrealistic assumptions of the other models in the traditional theory of the firm
- Discussion of external factors making markets more contestable – technological advances, globalisation.
- Discussion of economic models being used only as a framework or benchmark
- Discussion of how these models are likely to be used as a tool for decision making in modern firms

- Appropriate diagrams
- Appropriate examples

**\*The range of possible points illustrated here is much more extensive than would be required in an excellent response.**

### **Level 1 ([1]–[7])**

A basic response provides an answer that demonstrates:

- Basic knowledge and understanding of relevant terminology, concepts, principles and models.
- Basic application of relevant economic principles, terminology, concepts and models to the context of the question; some limited use of data, and diagrams where relevant, in relation to the context of the question.
- Basic analysis; analysis may lack focus.
- Judgement(s) unsupported.
- A low quality of written communication.

### **Level 2 ([8]–[15])**

A reasonable response provides an answer that demonstrates:

- Reasonable knowledge and understanding of relevant terminology, concepts, principles and models.
- Reasonable application of relevant economic principles, terminology, concepts and models to the context of the question; some reasonable use of data, and diagrams where relevant, in relation to the context of the question.
- Reasonable analysis in relation to the impact on economic agents; analysis may not be developed fully or may have inaccuracies at times.
- Reasonable judgement(s) building on analysis.
- A reasonable quality of written communication.

### **Level 3 ([16]–[23])**

A good response provides an answer that demonstrates:

- Good knowledge and understanding of relevant terminology, concepts, principles and models.
- Good application of relevant economic principles, terminology, concepts and models to the context of the question; some reasonable use of data, and diagrams where relevant, in relation to the context of the question.
- Good analysis in relation to the impact on economic agents; analysis may not be developed fully or may have inaccuracies at times.
- Reasonable judgement(s) building on analysis.
- A good quality of written communication.

### **Level 4 ([24]–[30])**

An excellent response provides an answer that demonstrates:

- Excellent accurate knowledge and understanding of relevant terminology, concepts, principles and models.
- Excellent application of relevant economic principles, terminology, concepts and models to the context of the question; where relevant, data and diagrams are used effectively to address the issues in the question.
- Well focused, relevant analysis used accurately and appropriately in relation to the impact on economic agents.
- Informed judgements that directly address the issues in the question and reach clear conclusions built on analysis.
- An excellent quality of written communication.

[30]

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AVAILABLE  
MARKS

- 7 Traditional economic theory assumes that consumers benefit from price competition. Price competition between firms leads to lower prices for consumers which increases consumer surplus. Lower prices also lead to an increase in real income and an increase in efficiency as firms are forced to reduce costs.

However, some economists argue that, in the long term, intense price competition can be detrimental to consumers since it leads to smaller/less efficient firms leaving the industry. This in turn reduces competition which has a negative impact on choice and quality and can lead to higher prices in the long term.

Those economists who support non-price competition argue that it can lead to price stability which allows consumers to plan more effectively. They also contend that it can lead to improved product quality and improved customer service. They argue that non-price competition can lead to a wider choice of products within a market and that advertising that is associated with non-price competition improves information and therefore competition and efficiency.

**Areas for analysis and discussion include:**

- Definition and explanation of price competition
- Examples of price competition
- Impact of price competition on consumer welfare
- Impact of price competition on real incomes
- Long term impact of price competition on competition levels and prices
- Impact of non-price competition on product quality
- Impact of non-price competition on customer service
- Impact of non-price competition on choice (positive and negative)
- Impact of advertising on information, competition and efficiency
- Reference to how some forms of non-price competition are designed to manipulate consumer tastes
- Reference to how some forms of non-price competition can create barriers to entry
- Appropriate diagrams
- Appropriate examples from supermarket and other industries

**\*The range of possible points illustrated here is much more extensive than would be required in an excellent response.**

**Level 1 ([1]–[7])**

A basic response provides an answer that demonstrates:

- Basic knowledge and understanding of relevant terminology, concepts, principles and models.
- Basic application of relevant economic principles, terminology, concepts and models to the context of the question; some limited use of data, and diagrams where relevant, in relation to the context of the question.
- Basic analysis; analysis may lack focus.
- Judgement(s) unsupported.
- A low quality of written communication.

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MARKS

**Level 2 ([8]–[15])**

A reasonable response provides an answer that demonstrates:

- Reasonable knowledge and understanding of relevant terminology, concepts, principles and models.
- Reasonable application of relevant economic principles, terminology, concepts and models to the context of the question; some reasonable use of data, and diagrams where relevant, in relation to the context of the question.
- Reasonable analysis in relation to the impact on economic agents; analysis may not be developed fully or may have inaccuracies at times.
- Reasonable judgement(s) building on analysis.
- A reasonable quality of written communication.

**Level 3 ([16]–[23])**

A good response provides an answer that demonstrates:

- Good knowledge and understanding of relevant terminology, concepts, principles and models.
- Good application of relevant economic principles, terminology, concepts and models to the context of the question; some reasonable use of data, and diagrams where relevant, in relation to the context of the question.
- Good analysis in relation to the impact on economic agents; analysis may not be developed fully or may have inaccuracies at times.
- Reasonable judgement(s) building on analysis.
- A good quality of written communication.

**Level 4 ([24]–[30])**

An excellent response provides an answer that demonstrates:

- Excellent accurate knowledge and understanding of relevant terminology, concepts, principles and models.
- Excellent application of relevant economic principles, terminology, concepts and models to the context of the question; where relevant, data and diagrams are used effectively to address the issues in the question.
- Well focused, relevant analysis used accurately and appropriately in relation to the impact on economic agents.
- Informed judgements that directly address the issues in the question and reach clear conclusions built on analysis.
- An excellent quality of written communication. [30]

**Section C****Total****AVAILABLE  
MARKS**

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